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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/634,077

08/04/2003

Daniel Christian Shavers

DN2002153

5234

27280

7590

02/15/2006

THE GOODYEAR TIRE & RUBBER COMPANY  
INTELLECTUAL PROPERTY DEPARTMENT 823  
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EXAMINER

SUN, XIUQIN

ART UNIT

PAPER NUMBER

2863

DATE MAILED: 02/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

<b>Office Action Summary</b>	Application No. 10/634,077	Applicant(s) SHAVERS ET AL.	
	Examiner Xiuqin Sun	Art Unit 2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6 is/are allowed.
- 6) ☒ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/12/2005 has been entered.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peacock (U.S. Pat. No. 3003545) in view of Wada et al. (U.S. Pat. No. 5485406).

In regard to claim 7:

Peacock discloses a tire-truing machine, comprising: a base having linear bearing guide rails for directing movement in an X direction parallel to the axis of the tire to be measured and trued (col. 3, lines 3-14); a truing device assembly mounted on a

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movable carriage, the carriage having linear bearings attached to the guide rail bearings (col. 3, lines 32-50); and a tire rotation device (col. 2, lines 35-55).

Peacock does not mention expressly: a profile measuring device mounted on a movable sled, the sled having linear bearings attached to the guide rail bearings.

Wada et al. disclose an apparatus and method for detecting the profile of the tread of a tire, including: a profile measuring device mounted on a movable sled, the sled having linear bearings attached to the guide rail bearings (cols. 1-2, lines 36-20; col. 3, lines 15-61).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wada et al. in the invention of Peacock in order to determine the profile of tire treads which is adapted to determine the radius of curvature for truing said tire (Wada et al., col. 1, lines 36-40).

In regard to claim 8:

Peacock teaches the apparatus that includes the subject matter discussed above. The teaching of Peacock further includes: a control system for directing the movement of the truing device assembly (Figs 1 and 2; col. 1, lines 44-70).

Peacock does not mention expressly: an electronic control system including a computer and software for compiling measurement data and establishing a virtual template to true the tire; and said control system directs the movement of the truing device assembly.

The teaching of Wada et al. includes: an electronic control system including a computer and software for compiling measurement data and establishing a virtual template to true the tire (cols. 1-2, lines 36-20; col. 3, lines 15-61).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Wada et al. in the invention of Peacock in order to provide a system that can automatically control the operation of the Peacock's truing device for truing a tire with high accuracy (Peacock, col. 1, lines 13-17).

In regard to claim 9:

Peacock further teaches: wherein the truing device assembly includes a truing cutter, truer device assembly having a Y direction movable carriage mounted to the X direction movable sled (col. 2, lines 56-72).

4. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peacock in view of Wada et al., as applied to claim 9 above, and further in view of Kuts (U.S. Pat. No. 3848501).

Peacock in view of Wada et al. teach the apparatus that includes the subject matter discussed above except: wherein the truer cutter includes a Z axis pivot system.

Kuts discloses a truer cutter for fabric cutting of a tire, wherein the truer cutter includes a Z axis pivot system (col. 2, lines 14-16; col. 3, lines 15-28).

In view of the teaching of Kuts, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Kuts in the combination of Peacock Wada et al. in order to provide a tire truing device

assembly which permits three-dimensional movement of the truer cutter (Kuts, col. 2, lines 10-39).

***Allowable Subject Matter***

5. Claims 1-6 are allowed.

***Reasons for Allowance***

6. The following is an examiner's statement of reasons for allowance:

The primary reason for the allowance of claims 1-6 is the inclusion of the limitations of measuring a plurality of radial points in different locations about a circumference of the tire in each of several circumferential planes located between the tread shoulders; wherein the circumferential planes correspond to tread lugs; determining a radial low point from the plurality of radial points in different locations for each circumferential plane and determining a virtual tread profile from the radial low points. It is these limitations found in each of the claims, as they are claimed in the combination that have not been found, taught or suggested by the prior art of record, which make these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments***

7. Applicant's arguments filed 12/12/2005 with respect to claims 1-10 have been fully considered but are moot in view of the new ground(s) of rejection.

Upon further consideration, the allowable subject matter of claims 7-10 as indicated in the previous Office Action has been withdrawn, as new prior art has been found to teach the claimed invention. Any inconvenience to the Applicant(s) is regretted.

Applicant's arguments regarding claims 1-6 are persuasive. The allowable subject matter of these claims are identified as set forth above in this Office Action.

***Prior Art Citations***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- 1) Scharz et al. (U.S. Pat. No. 6739186) disclose a method for minimizing the radial runout of a tire and rim assembly.
- 2) Shteinhaus (U.S. Pub. No. 20020177964) disclose methods and apparatus for predicting tire uniformity.
- 3) Williams et al. (U.S. Pat. No. 6615144) disclose methods and apparatus for predicting tire uniformity.

**Contact Information**

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Xiuqin Sun whose telephone number is (571)272-2280. The examiner can normally be reached on 6:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571)272-2269. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Xiuqin Sun  
Examiner  
Art Unit 2863

XS  
February 8, 2006

  
MICHAEL NGHIEM  
PRIMARY EXAMINER